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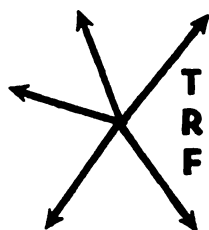
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Depressed Regions and Transportation Investment

by John M. Munro*

Transportation is a favorite sector to receive assistance in the course of programs of regional development. In many European countries, notably France and Italy, programs to stimulate regional economic growth by expenditures on transportation are fairly common. The United States has also engaged in regional subsidization through spending on transport. In Canada we are all familiar with such regionally-oriented federal programs as operating subsidies for coastal shipping, the Maritime Freight Rates Act, and the Crow's Nest rates on grain. Such programs seem quite popular in most quarters. For example, the report of the MacPherson Commission stated that:

We are able to suggest that it is not unwise to use transportation, properly applied, as an instrument for the pursuit of National Policy objectives, particularly in a setting where great distances are a limiting factor to balanced national growth. It may be that, in the future, National Policy for development of resources, industries, or regions will go even further than at present in taking upon the shoulders of the nation a share of the burdensome costs of distance.¹

The purpose of this paper is to discuss some considerations that should influence government investment in transportation facilities in depressed regions. The development highway system in the Appalachian region of the United States authorized by the Appalachian Redevelopment Act of 1965 will provide examples of the motivation and planning for programs of this type.

The paper will begin by considering at some length the causes of regional depression with a view towards revealing suitable policy measures to eliminate this condition. The next section will carry this discussion further by exploring the question: Should a government help depressed regions? It will be seen that the justification for such assistance varies in terms of the government's expressed goals and the actual conditions of the depressed region. Then the paper will consider the use of transportation investment as a form of aid to depressed regions, paying particular attention to the often-heard contention that the "inadequacy" of transportation facilities and services is a cause of regional depression. Finally, the planning and impact of the Appalachian development highway system will be examined.

I

All depressed regions share the unhappy characteristics of levels of per

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¹ Canada, Royal Commission on Transportation, Report, Vol. II (Ottawa: Queen's Printer, 1961), pp. 5-6.

capita income and other measures of the standard of living that are "low," according to generally-accepted criteria. The selection of the cut-off point between poor regions and rich regions must of necessity be rather arbitrary. For a depressed region—one which is markedly poorer than some other regions in the country in which it is located—the standard of regional poverty is based on inter-regional comparisons within that country.

The basic causes of regional depression are typically similar in all cases. Almost all depressed regions exhibit resource immobility—the failure of resources to seek their most profitable employment. For labour this involves the unwillingness or inability of workers to migrate to areas where higher real wages may be earned. For capital, immobility occurs when investment in one area with low rates of return is preferred to those with higher rates of return in another area or areas. Resource immobility is essentially irrational, economically, but it is a very real fact of economic life and should be expected to continue distorting the optimal interregional allocation of resources as long as such factors as ignorance of opportunities, unemployable labour, and regional emotionalism are present. In other words, some degree of resource immobility is more or less permanent.

The most promising adjustment towards prosperity for both underdeveloped and depressed regions is for labour to move out and/or capital to move in.² For depressed regions, given the existence of a prospering national economy, the out-migration of labour seems to offer the best hope of regional economic improvement. An influx of capital in quest of highly profitable investment opportunities is not to be expected. Recognizing that outmigration of labour is not always a possible or acceptable policy for governments to embrace, we will next examine the conditions under which government aid to depressed regions can follow the other route to regional development—increasing the stock of capital in the region. Even though private capital is unlikely to flow into depressed regions, can the public sector provide capital and duplicate the effects that would be achieved through an inflow of private capital?

II

It would seem that the national government probably can do this, although in nonsocialist economy the inflow of public capital (presumably restricted to such things as transportation, education, health and welfare, electric power, and water resource development) may not be as flexible or produce the same results as would an inflow of private capital into the private sector. Investment by the public sector, however, often calls forth additional investment by the private sector, and vice versa. But acceptance of the fact that the government can influence the growth of depressed regions by means of specially-directed investment does not relieve us of the responsibility of considering whether it should. To explore this question further we will consider how we might classify the motives for government aid to depressed regions.

² This is the desired end result. The means by which the government may achieve or induce the export of labor and/or the import of capital are quite varied and may involve expenditures on a wide range of projects. But the purpose of the expenditures should always be kept in mind. The spending of government funds on projects which serve neither of the ultimate ends of moving labor out and capital in will not make a lasting and substantial contribution to regional economic progress.

First, there are the purely economic motives—those which support the implementation of regional assistance programs because of their contribution to the economic welfare of the whole nation. There are three of these:³

1. The existence of unexploited opportunities for investment in social overhead capital because of the fiscal weakness of regional governments. For example, a region's government(s) may be unable to construct a highway that is justified in that its estimated benefits exceed its costs.
2. The avoidance of the social costs associated with economic decline and outmigration in a region. These costs could arise either out of the financial arrangements for capital already in place or out of the inability of the reduced population to support certain business and public services of high quality. An example of the first situation would be a bridge financed by tolls. If traffic declined by 50 per cent, tolls would have to be doubled to maintain the same level of total revenue (assuming perfectly inelastic demand). The second situation could be exemplified by an area with a declining population being unable to support a good secondary school system, a resident physician, or a wide range of retail outlets. The alternatives would all impose higher costs, in various forms, on the remaining population.
3. The avoidance of social costs in the regions, usually urban, that receive people that leave depressed regions. These costs arise out of the low educational attainment of many migrants, their all-too-common lack of marketable labour skills, and the pressure they place on urban facilities. Programs justified by this reason may involve improving the education and vocational training of potential migrants from depressed regions.

The last two of these three reasons for programs of regional aid both rest on the existence of benefits that are external to the project being evaluated. They should be adopted with caution. The second may have economic relevance only in the short run. When the time comes to replace the region's capital stock it should, where possible, be reduced in size. This will solve at least part of the over-capacity problem. The problem with the third reason is that it may serve to justify programs designed solely to discourage population migration from depressed regions. The argument here would be that since migrants impose extra welfare, education, and other costs on the regions to which they move, a more desirable alternative would be to keep them at home. In fact, immigration has historically been both a sign and a source of regional prosperity and development (once the initial problems of adjustment have been overcome) and efforts to fix the existing distribution of population can only cut back on economic development in the prospering regions and in the country as a whole.

Two further points need to be made concerning these economic justifications for programs of regional aid. First, such programs should be evaluated

³ These points are taken, in part, from George H. Borts, "Criteria for the Evaluation of Regional Development Programs," paper presented to the Third Conference on Regional Accounts, Committee on Regional Accounts and Resources for the Future, Miami Beach, Fla., November 19-21, 1964, pp. 1-8.

with reference to other possible uses for federal funds. This means that the benefits and costs of regional development programs need to be measured from a "national" point of view⁴ and the programs carried out only if they bring a greater return than alternative programs. If \$10 million spent on highways in depressed region "M" will retain discounted benefits of \$12 million while the same amount spent on aid to university education in prosperous region "O" will produce discounted benefits of \$15 million, the government's decision is clear. If efficiency considerations are to be paramount, the funds should be devoted to university education in region "O", prosperous though it may already be.

This is an appropriate place to raise the second qualification of economically-justified programs of regional aid. As we all know, governments are rarely motivated solely by economic considerations. Other factors play roles of varying importance in government decisions and are equally defensible as goals of national policy. Two such factors, or goals, are the achievement of income equality between regions and the elimination of poverty. This first objective is area-oriented. It presumes that the inequalities of regional depression are an offence against the nation's collective conscience and that their partial or total elimination is needed. This goal is often expressed in terms of the belief that "if only" a given depressed region could get some help from outside it could take its rightful place among the nation's community of prosperous, productive regions. The second goal, the elimination of poverty, is people-oriented rather than area-oriented. Here it is not the general equality of regional averages that is sought but rather the alleviation of the effects of regional depression on those who live in depressed regions.

III

Regional requests for assistance in the form of transportation investment typically revolve around complaints that the existing transport system is "inadequate" or that costs of transportation are "too high." These complaints usually include, sometimes implicitly, comparisons with more prosperous regions which are believed to be favored as far as transportation is concerned. The first comment that we can make here is that investment in right-of-way and structures is not the only way in which transport costs can be lowered. Improvements in vehicle design and technology, elimination of inefficient transport operating practices, and adoption of better logistics practices by regional shippers can all be very effective in lowering the level of transportation costs in a region.

A second comment may be directed at the assumption, implicit in the above approach, that the existence of interregional inequalities in average transportation costs indicates a need for elimination of these differences. Even assuming that inefficiencies in transportation operations have been corrected, that vehicle design is the most advanced that is practicable, and that logistics practices minimize total transport costs to shippers, there is still nothing that can be said concerning the desirability of investing in improved transport

⁴ This means, for example, that program benefits in the depressed region must be measured net of any disbenefits in other regions. Also, program costs supplied by the federal government must be included. To the region they may be manna from Heaven but the national government, which should perform the benefit-cost analysis itself, can hardly so regard them.

right-of-way in order to achieve more equal transportation costs for all regions. The equalization of transport costs in different regions as an express and unqualified goal of government policy is basically no more logical than a policy of equalizing the space-heating costs incurred in different regions. Vancouver has about 5,100 degree days (using a 65 degree base) per year while Winnipeg has some 10,400.⁵ Yet no one argues for a program of subsidies to Winnipeg residents and businesses to help them keep warm; the higher cost of heating is accepted as an inherent feature of the environment. So, too, in many situations, should higher costs of transportation be viewed.

We would contend that a region's transport system is only inadequate, given the assumptions in the preceding paragraph, if there exist unexploited, socially profitable opportunities for investment in transport facilities. The term "socially profitable" implies that the benefits and costs of prospective transport investments will be evaluated with reference to their effect on all segments of society and that those projects for which benefits exceed costs by the greatest amount will be constructed first. The crucial point here is that costs should be incurred commensurate with the benefits that can be obtained from specific programs and projects.

For those modes of transportation for which facilities are provided by the private sector (railroads⁶ and pipelines) this means that the desirability of an investment should be evaluated in a rather broader and more socially-oriented context than the pursuit of private profit would indicate. The existence of unexploited investment opportunities in these two privately-supplied modes could only be explained by:

1. No consideration of spillover-type benefits that accrue to society as a whole but are not reflected in the transport firm's profits.
2. The transport firm's lack of awareness of good investment opportunities.
3. Pursuing of monopolistic policies and practices by the transport firm.

For the transport modes for which facilities are supplied by the public sector (highways, waterways, airways) investment evaluation with reference to social profitability means that careful attention must be paid to cost and benefit spillovers; it is not enough just to calculate the direct costs and benefits or proposed projects or programs and use these estimates in benefit-cost analysis. Transport inadequacy in the public-sector modes could then arise in one or both of two ways:

1. Failure to evaluate correctly the direct and indirect costs and benefits of transport investment projects. This is particularly likely to happen with respect to benefits since services are not "sold" directly (in the way, for example, railway services are sold) and since indirect benefits are often widely diffused throughout an entire regional economy.

⁵ Author's rough calculation based on Department of Transport information. The degree day is a unit which measures the nominal heating load. On a 65-degree base, a degree day may be defined as follows: for any one day there exist as many degree days as there are positive degrees of temperature difference between 65 degrees and the average temperature for the day.

⁶ Canadian National Railways is here included with the private sector although in fact as a Crown corporation it rather straddles both public and private sectors.

2. Fiscal weakness of governments responsible for providing transport facilities. Governments may be unable, for example, to build needed roads because they do not have sufficient tax and other revenues. "Needed" here means that benefits, correctly evaluated, exceed costs similarly correctly evaluated.

Both these situations undoubtedly exist now in some regions and have existed in the past, but this should not lead us to conclude that they are universal. Indirect benefits are by no means always of importance in transport investment nor do poor governments always have necessary investment projects that their poverty precludes them from pursuing.

We may identify four important conclusions that were developed in this section.

1. Total unit transportation costs do not consist mainly of costs associated with right-of-way facilities. Vehicles, operating practices, and logistics policies of shippers also determine the pattern of a region's transportation costs.
2. There is no particular reason to expect interregional equality in transportation costs and the existence of inequality does not constitute a prima facie case for programs to change this.
3. Interregional inequality with respect to transport costs may very well be inevitable unless provision is made for extensive subsidization of transportation in disadvantaged regions.
4. Transport "inadequacy" only exists, in the economic sense, when one or more of several rather restrictive conditions are present. The declaration that transport costs are "too high" is insufficient to prove inadequacy.

IV

The development highway system authorized by the Appalachian Re-development Act of 1965 provides interesting illustrations of several of the points developed in previous sections of this paper.⁷

Appalachia, as defined in this Act, includes 373 counties in 12 states that reach from just north of Montgomery, Alabama to just south of Syracuse, New York. Their 1960 population was 17.2 million. The westernmost point of the region is the Alabama-Mississippi boundary and the easternmost point (in northeastern Pennsylvania) is within 60 miles of New York City. This is an extremely diverse area in terms of economic and social conditions and the topographical orientation of the region's original definition provides little foundation for generalizations about Appalachia's society and economy. About all that we can say with any certainty is that large parts of this Appalachian region are more or less unique in their combination of low per capita incomes, high rates of unemployment, and low rates of participation in the labor force. The persistence and extent of these shortfalls from national

⁷ The material in this section is a necessarily brief summary of parts of my doctoral dissertation, *Transportation Investment and Depressed Regions: The Case of Appalachia*. (Unpublished D.B.A. dissertation, Graduate School of Business, Indiana University, 1966.)

U.S. averages justify Appalachia, or at least parts of it, being titled a depressed region.⁸

Upwards of 2 million people left Appalachia in just the 1950-1960 decade, but this exodus was insufficient to bring about the economic readjustment required to move the region out of the depressed category. Nor is out-migration likely to be a total solution for Appalachian depression in the future. Not only do state and local government officials in the region resist any overt federal policy designed to stimulate migration to more prosperous regions⁹ but the Appalachian people themselves are reluctant to leave the region. Moreover, their generally poor education and lack of desirable employment skills and attitudes tend to reduce the usefulness of Appalachian migrants, even in regions experiencing labor shortages.

This suggests that if the goal of government policy is to be the rejuvenation of the Appalachian economy and the improvement of the lot of the region's residents, an inflow of capital will be required. Given the lack of attractive opportunities for private profit in Appalachia, additions to the region's stock of capital will have to come from, or be stimulated by, investment by the public sector.

This may be identified as the economic purpose of the Appalachian development highway system.¹⁰ It also appears to have interesting political purposes, using the term "political" in the narrowest of its meanings, but there is not time to consider them here. The development highway system represents an effort to stimulate the economic development of the Appalachian region by adding to the region's stock of social overhead capital in the form of highways. It has been alleged that the region's highway system is inadequate and that as a result Appalachia is being "strangled by (its) isolation from the mainstream of American life."¹¹ To overcome this, 2,350 miles of high-type primary highways and 1,000 miles of lower quality access roads are to be built in 11 of the 12 Appalachian states (all except New York, which will probably receive a supplementary program). The cost of the program, to run through July, 1971, was set at \$1.2 billion,¹² with 70 per cent

8 Appalachia is not the poorest region, in terms of median family income, in the United States. Only 13 of the 50 poorest U.S. counties in 1969 were located in the region. Most of the poorest counties are found in the cotton belt of Mississippi, Alabama, Georgia, and Arkansas.

9 Their viewpoint has been very well expressed by former Governor Combs of Kentucky. "If these people want to live there [in the Appalachian region], I think they are entitled to do so, and they should be provided a way to make a decent, honorable, honest living. And I think it is incumbent on those of us who have some position of leadership to make every possible effort to find the means by which those people can make an honest living in this area." Mary Jean Bowman and W. Warren Haynes, *Resources and People in East Kentucky: Problems and Potentials of a Lagging Economy* (Baltimore: Johns Hopkins, 1963), p. 253.

10 The other programs authorized by the Appalachian Redevelopment Act of 1965 include the following: construction and operation of demonstration health facilities; land improvement, pasture development, and erosion control; improvement of timber resource management and utilization; restoration of mining areas and study of strip mining practices; development and utilization of water resources; vocational school construction; construction of sewage treatment works; and supplements to other federal grant-in-aid programs. See Public Law 89-4.

11 The quotation is from Congressional testimony by Franklin D. Roosevelt, Jr., Chairman of the President's Appalachian Regional Development, Hearings, *Appalachian Redevelopment Act of 1964*, 88th Cong., 2nd Sess., 1964, p. 19. This Commission developed the program incorporated in the Appalachian Redevelopment Act of 1965.

12 Exact comparison of this part of the Appalachian program with other parts is impossible because of differing authorization periods. However, over the first two years it appears that highways will receive 68 per cent of total federal and state expenditures and all other programs (see footnote 10) the remaining 37 per cent.

to be provided by the federal government and 30 per cent by each of the affected states.

Several criticisms may be made of the assumptions and process of the planning of the development highway system. First, and most important, no convincing evidence was presented to prove the case that the existing Appalachian highway system is inadequate. On the contrary, available data from the Bureau of Public Roads and the 1963 Census of Transportation indicates that the extent and financing of Appalachian highways compares favorably with national U.S. averages, that operators of trucks registered in the Appalachian states use their vehicles more efficiently than the national average, and that Appalachian shippers make rather greater use of highway transportation than do shippers in the rest of the United States. Perhaps because of the absence of proof of inadequacy, no attempt was made to measure or even identify (beyond the level of superficial platitudes) the actual benefits of this program. This omission is partly explained, although not excused, by the equally glaring absence of any comprehensive plan of development for the Appalachian region.

The direct costs of the development highway system were only vaguely estimated and varied considerably at different stages of the program. The final authorization of \$840 million in federal funds appears to fall short by at least \$125 million for the development highway system and \$35 million for the access road system, even with the latter's size reduced by one-half to 500 miles. Inflationary increases in construction costs could further enlarge this deficiency.

A third criticism involves the selection of the routes of the development highway system. The system's purpose has been described as: ". . . to create traffic and open up areas where commerce and communication of people with people have been sorely inhibited by lack of ready access."¹³ But the Appalachian system's "corridors" generally coincide, in fact, with the most-travelled highways in the region, with the exception of those highways which are part of the Interstate System. Furthermore, the basis for selection of the corridor segments that require reconstruction (i.e., on which the \$1.2 billion is to be spent) is an adequacy rating based on current traffic levels.¹⁴ This is a strange sort of criterion to use for a highway system that is supposed to generate traffic in the future by stimulating economic development. Finally, the Appalachian Regional Commission, the federal-state body which is responsible for the program, has stated that the "prime objective" in designing the development highways shall be the provision of a 50 mile per hour average travel speed between major termini.¹⁵ The relevance of the goal to the promotion of the economic development of Appalachia is at best highly indirect.

We may develop two conclusions from this brief discussion of the Appalachian development highway system. First, the region, or at least large

13 President's Appalachian Regional Commission, *Appalachia* (Washington: U.S. Government Printing Office, 1964), p. 33.

14 U.S. Department of Commerce, Bureau of Public Roads, *Instruction Manual for Preparation and Submission of the 1966 Estimate of Cost of Improving Inadequate Segments of the Appalachian Development Highway System* (Washington: U.S. Department of Commerce, 1965), p. 10.

15 Appalachian Regional Commission, *Resolution No. 10, May 12, 1965*.

parts of it, are characterized by long-lasting depression. Therefore, if a greater measure of interregional equality is deemed to be an important goal of government policy and if the more automatic economic devices for achieving this equality—outflow of population and inflow of private capital—are inadequate, then government investment can be justified. But the government investment should be directed to sectors where it will be most effective in stimulating regional economic development and the details of investment programs must be carefully planned and correlated with other related and unrelated changes expected in the region's economic environment. For our second conclusion we would contend that the Appalachian development highway system satisfies neither of these criteria.

V

This paper suggests three conclusions that have some relevance to the Canadian situation. First, government programs designed to benefit one region, or a group of regions, may very well result in a reduction in the rate of national economic progress. Exceptions to this statement do exist, as discussed in section II, but they are not required to justify regional development programs. It may be deemed necessary to have a greater measure of regional economic equality, even at the price of a lower national income and we can accept this regional subsidy if it is the will of the nation as expressed through the political process. However, the subsidy should be the most efficient possible. If the goal of the subsidy is to promote the economic development of the nation's lagging regions, then it would make sense to allocate the subsidy to those sectors of the regions' economies that can contribute the most to this end. Section III of this paper impels the second general conclusion; namely, that the transportation sector is apt to be an ineffective vehicle for achieving greater interregional economic equality. Depressed regions have, almost by definition, little of the unexploited natural resources or, especially, the economic dynamism that have been found to be necessary for successful transportation investment.¹⁶ Other directions for growth-stimulating investments would appear to be more effective in producing a significant change in the fortunes of a depressed region. Finally, Section IV's discussion of the Appalachian development highway program points out how apparently easy it is to choose transportation as a prime ingredient of programs of regional development. The ease with which this choice is made was, in this case at least, not at all inhibited by the economic realities of the Appalachian region. Whether by ignorance or intention, little consideration was given to the actual effects of or need for this program.

This omission illustrates once more that we need better information and more research concerning the process and determinants of regional economic development and transport's role in that process. Had better knowledge been available it is unlikely, for example, that the last Royal Commission on

¹⁶ For a discussion of these prerequisites see George W. Wilson, "Transportation Investment and Economic Development in Underdeveloped Countries," *Canadian Transportation Research Forum, Papers, First Annual Meeting*, pp. 425-433. Other skeptical views of the strength and generality of the causal relationship between transportation investment and economic development are contained in two recent studies of the railroads' role in U.S. economic growth. These volumes are Albert Fishlow, *American Railroads and the Transformation of the Ante-Bellum Economy* (Cambridge, Mass.: Harvard University Press, 1965) and Robert W. Fogel, *Railroads and American Economic Growth: Essays in Econometric History* (Baltimore: Johns Hopkins, 1964).

Transportation would have recommended the elimination of most of the intra-select territory subsidy authorized by the Maritime Freight Rates Act.¹⁷ Whatever the actual merits of this particular regional transportation subsidy (a question that, to my knowledge, has never received careful analysis in terms of the Act's role in stimulating the development of the Atlantic Provinces), this modification will probably harm the region that is supposed to be helped. This change should result in an increase in the region's imports. Higher imports will reduce regional income, thus increasing the inequality between the Atlantic Region and other Canadian regions. If we are to offer effective aid to chronically depressed areas, we must become better informed about the causes of depression, the process of regional economic development, and the comparative effectiveness of various types of development programs.

Transportation is a favorite sector to receive assistance in the course of programs of regional development. This paper discusses some considerations that should influence government investment in transportation facilities in depressed regions. The development highway system under construction in the Appalachian region of the United States provides examples of the motivation and planning for programs of this type.

Three conclusions are developed that have some relevance to the Canadian situation. First, government programs designed to benefit one region may well result in a reduction in the rate of national economic progress, unless certain conditions are met. These conditions, which involve divergences between social and private costs and benefits in the region and the nation, are not, however, necessary to justify regional development programs. It may be deemed necessary to have a greater measure of regional economic equality, even at the price of a lower national income, and we can accept this regional subsidy if it is the will of the nation as expressed through the political process. However, the subsidy should surely be the most efficient possible. If the goal of the subsidy is to promote the economic development of a lagging region, then it would make sense to allocate the subsidy to those sectors of the region's economy that can contribute the most to this end.

The second conclusion is that the transportation sector is likely to be an ineffective vehicle for achieving greater interregional economic equality. Depressed regions have, almost by definition, little of the unexploited natural resources, or especially, the economic dynamism that have been found to be necessary for successful transportation investment. Other directions for growth-stimulating investment would appear to be more effective in producing a significant change in the fortunes of a depressed region.

Finally, the Appalachian development highway program provides an illustration of how easy it is to choose transportation as a prime ingredient of programs of regional development. The ease with which this choice is made was, in this case at least, not at all inhibited by the economic realities of the Appalachian region. Whether by ignorance or intention, little consideration was given to the actual effects of or need for this program. This omission provides additional evidence that we need better information and more research concerning the process and determinants of regional economic development generally and transport's role in that process.

¹⁷ Canada, Royal Commission on Transportation, *op. cit.* pp. 212-218.

RESUME DE "REGIONS A ACTIVITE ECONOMIQUE RALENTIE ET INVESTISSEMENT EN MATIERE DE TRANSPORT"

de John M. Munro

Le domaine du transport est particulièrement favori en matière d'aide et assistance lors de la réalisation de programmes de développement régional. Le présent document expose certaines considérations susceptibles d'influer sur les investissements officiels dans le domaine du transport en ce qui concerne les régions à faible activité économique. Aux Etats-Unis, la construction de réseau routier de la région des Appalaches offre un exemple des raisons à la base des programmes de ce genre et de leur planification.

Trois des conclusions de l'auteur ont quelque rapport avec la situation qui se présente au Canada. D'abord les programmes officiels dont bénéficiera une région donnée, peuvent très bien avoir pour conséquence une diminution du taux de l'expansion économique nationale, sous certaines conditions; celles-ci qui supposent certains écarts entre les dépenses encourues et les avantages retirés par la société et les particuliers de la région et de la nation tout entière, ne doivent cependant pas nécessairement être remplies pour que soit justifiée la mise en oeuvre de programmes de développement régional. On peut estimer utile de réaliser, dans une plus large mesure, une égalité économique entre les régions même au prix d'un revenu national inférieur, et les subventions régionales peuvent être acceptées si telle est la volonté nationale exprimée par les moyens politiques. Quoi qu'il en soit, la subvention doit absolument avoir la plus grande efficacité possible; si elle vise à promouvoir le développement économique d'une région moins avancée, il serait opportun d'en allouer le montant au secteur de son économie qui contribuerait le plus à cette fin.

La deuxième conclusion considère les transports comme probablement inefficaces dans la réalisation d'une plus grande égalité économique inter-régionale. Les régions économiquement retardées ne possèdent, par définition ou presque, qu'une faible partie des ressources naturelles inexploitées, ou elles manquent plus précisément du dynamisme économique trouvé nécessaire au succès des investissements dans le domaine du transport. D'autres directions données aux investissements qui visent à stimuler l'expansion, sembleraient propres à produire un changement marqué dans les chances de développement de toute région économiquement retardée.

La dernière conclusion constate que le réseau routier des Appalaches en cours de réalisation, illustre combien il est facile de désigner le transport comme l'élément primordial des programmes de développement régional. Cette facilité du choix n'a été, au moins en ce cas, gênée en rien par les réalités économiques de la région dont il s'agit. Que ce soit par ignorance ou intentionnellement, peu de considération a été donné aux effets réels de ce programme ou à sa nécessité. Une telle omission apporte une preuve supplémentaire du besoin d'une meilleure information ou d'une recherche plus poussée concernant les méthodes et éléments déterminantes du développement économique régional en général et du rôle des transports en cette question.